

been seen in any substantial number of patients.

Investigations are now being carried out using cryosurgery in the management of patients with cervical intraepithelial neoplasia, that is, dysplasia and carcinoma *in situ*. These studies are still investigational and must only be done by those who are experts in colposcopy.

DUANE E. TOWNSEND, MD

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Electronic Monitoring of the Fetus and Its Cost

FOR MANY YEARS fetal heart rate has been used as an indicator of fetal distress. Recent electronic advances make it possible for this to be done continuously rather than intermittently. The patterns of heart rate change elucidated by Hon enable the obstetrician to more adequately manage his fetal patient. This can be done at a relatively low cost (about \$35.00). Some investigators have shown there to be a decrease in perinatal mortality coincident with the use of continuous fetal heart rate monitoring. Assuming fetal brain damage occurs before fetal death, one might anticipate a reduction in perinatal brain damage associated with continuous monitoring. If such a reduction occurs, it would more than compensate the cost to each patient.

E. J. QUILLIGAN, MD

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Menstrual Extraction

MENSTRUAL EXTRACTION is an office procedure for the evacuation of the uterus before a definitive diagnosis of pregnancy can be established by routine pregnancy tests. It is done usually between the 29th and 42nd day after the first day of the last menstrual period.

The technique is similar to that of a routine therapeutic abortion using suction curettage, ex-

cept cervical dilatation is unnecessary. Oral analgesics or paracervical block or both can be administered just before the procedure. A small-diameter flexible polyethylene cannula (4 to 6 mm Karman® catheter) can be used with either an electric vacuum pump or a hand operated syringe as a vacuum source. Completeness of evacuation can be confirmed by exploring the uterine cavity with a small metal curette. It is important that the patient be examined after two weeks and that a pregnancy test be made. A small percentage of pregnancies may be missed with this procedure.

The major disadvantage is that a certain number of women will be found not to be pregnant and therefore an unnecessary procedure will have been done.

JEROME W. H. NISWONGER, MD

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Luteinizing Hormone-Releasing Hormone as a Provocative Test of Pituitary Gonadotropin Function

NORMAL OVULATION is a result of a synchronization of the hypothalamic-pituitary-ovarian axis. Until recently the functional integrity of the hypothalamus and pituitary could not be evaluated separately. Determination of urinary or serum gonadotropin has served as an index of intactness of hypothalamic-pituitary function. Withdrawal bleeding following progesterone administration indirectly measures the functional integrity of the hypothalamic-pituitary-ovarian axis, although bleeding can occur even when the axis is operating in a dysfunctional manner.

In 1971 luteinizing hormone-releasing hormone (LRH), a hypothalamic hormone, was isolated, the structure determined and the compound subsequently synthesized. The availability of LRH has given the gynecologist a hormone which can measure the ability of the pituitary gland to synthesize as well as release luteinizing hormone (LH) and follicle stimulating hormone (FSH).

Patients presenting with amenorrhea should first be screened for genetic and endocrine causes other than hypothalamic-pituitary-ovarian axis

dysfunction. If these are ruled out, 100 μ g of synthetic LRH is administered intravenously over a five-minute period. Baseline and serial blood samples are drawn over a two-hour period and subsequently assayed for FSH and LH. A significant rise in LH and FSH indicates an intact pituitary which is capable of responding to an appropriate stimulus. The interpretation of test results does not appear to be complex. It is anticipated that synthetic LRH will be clinically available in the near future. At that time its use should become a

routine diagnostic and prognostic test in the evaluation of patients presenting with amenorrhea suspected to be caused by hypothalamic-pituitary-ovarian axis dysfunction.

FREDERICK W. HANSON, MD

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